Public Draft

Montana Fish, Wildlife & Parks

Region One
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Ref:DV109-04
July 19, 2004

TO: Governor's Office, Attn: Todd O'Hair, PO Box 200801, Helena, 59620-0801
Environmental Quality Council, PO Box 201704, Helena, 59620-1704
*Dept. of Environmental Quality, Planning, Prevention & Assistance, PO Box 200901, Helena, 59620-0901
*Dept. of Environmental Quality, Permitting Compliance, PO Box 200901, Helena, 59620-0901
DNRC, PO Box 201601, Helena, 59620-1601; Kalispell: Jon Dahlberg
Montana Fish, Wildlife & Parks - Director's Office: Reg Peterson; Parks: Walt Timmerman, Allan Kuser; Legal Unit: Brandi Fisher
*SHPO, PO Box 201202, Helena, 59620-1202
*Montana State Library, 1515 East Sixth Ave., Helena, 59620-1800 (e-mailed)
Jim Jensen, Montana Environmental Information Center, PO Box 1184, Helena, 59624
George Ochenski, PO Box 689, Helena, 59624
Wayne Hirst, Montana State Parks Foundation, PO Box 728, Libby, 59923
Montana State Parks Association, PO Box 699, Billings, 59103
Joe Gutkoski, President, Montana River Action Network, 304 N 18th Ave., Bozeman, 59715
Rep. Bernie Olson, 161 Lakeside Blvd., Lakeside, 59922
Rep. Stanley Fisher, 76 Golf Terrace Drive, Bigfork, 59911-6252
Sen. Bob Keenan, Box 697, Bigfork, 59911-0697
Flathead County Commissioners, 800 S Main Street, Kalispell, 59901
Lake County Commissioners, 106 Fourth Avenue E, Polson, 59860
Flathead County Library, 247 First Avenue E, Kalispell, 59901
Flathead County Library, 521 Electric Avenue, Bigfork, 59911

Ladies and Gentlemen:

Montana Fish, Wildlife & Parks (FWP), Region One, has written a draft Environmental Assessment (EA) for Wayfarers State Park for the purpose of completing a forestry project involving removal of hazardous trees; opening the understory to promote health of ponderosa pine; reducing stress on trees due to competition for light, water, and nutrients; and reducing fuel loads.

The draft EA will be out for public review until August 17, 2004. Please direct your questions or comments to Regional Parks Manager Marty Watkins, FWP, 490 N. Meridian Rd., Kalispell, MT 59901, or e-mail mawatkins@state.mt.us.

Sincerely,

Daniel P. Vincent
Regional Supervisor

/ni
Enclosure

*E-mailed

Public Draft

Wayfarers Forestry Project

MEPA/NEPA/HB495 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action:

The purpose of this project is to complete a forestry project at Wayfarers State Park. The objective is to maintain the property over time for safe public use, with a forest cover that is healthy, and fire and wind resistant. In consideration of fire behavior, tree crowns that are not touching will provide a crown-fire-resistant stand or community of trees. A healthy stand, with a mixture of tree species native to the site with a diversity of tree sizes and ages, is the desired future condition. The long-term goal is to restore the site to the historic stand structure of large, open, park-like stands dominated by ponderosa pine, with some Douglas fir. The specific objectives of this project will be:

1. To remove hazardous, diseased, and dead or dying trees.
2. To open the understory to promote the health of ponderosa pine.
3. Reduce stress on trees due to competition for light, water, and nutrients. That stress is resulting in increasing mortality due to the combined effects of dwarf mistletoe, root rot, and bark beetles.
4. To reduce fuel loads, ladder fuels, and the possibility of crown fires in order to protect the park and adjacent private lands.

2. Agency Authority for the Proposed Action:

Montana Codes Annotated 23-1-101

3. Name of Project: Wayfarers Forestry Project

4. Name, Address, and Phone Number of Project Sponsor (if other than the agency):

5. If Applicable:

Estimated Construction/Commencement Date: **12/1/2004**
Estimated Completion Date: **5/1/2005**
Current Status of Project Design (% complete): **50%**

6. Location Affected by Proposed Action (county, range, and township):

Flathead Lake State Park, the Wayfarers State Park Unit, including Harry Horn, Flathead County, T27N, R20W

7. Project Size: Estimate the number of acres that would be directly affected that are currently:

	Acre		Acres
(a) Developed:		(d) Floodplain	
residential			
industrial		(e) Productive:	
		irrigated cropland ..	
(b) Open	67	dry cropland	
		forestry	
(c) Wetlands/Riparian Areas ...		rangeland	
		other	

8. Map/Site Plan: Attach an original 8½" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

See Attachment A

9. Narrative Summary of the Proposed Action or Project, Including the Benefits and Purpose of the Proposed Action:

Flathead Lake State Park, Wayfarers Unit, is located on the edge of Bigfork and is surrounded by private property, both in larger parcels and small housing lots. No forest management has been done at this site, other than hazardous tree removal, for at least 35 years. As a result the existing forest is dense and overcrowded, with stands dominated by Douglas fir.

In 2003 Fish, Wildlife & Parks (FWP) contracted with a forester to look at the forest environment on all lands managed by FWP's State Parks Division. The subsequent environmental assessment and Region One Vegetation and Hazard Tree Management Plan were adopted on September 3, 2003. In the assessment of FWP properties, Wayfarers State Park was identified as one of the high-priority sites for a forest management plan. Because the recommended prescription area at Wayfarers is over 10 acres, a separate environmental assessment was required before a treatment could be done in this area, hence this environmental assessment. In the 2003 plan, the recommended treatment for this area was a commercial thinning of dense Douglas fir stands to 25-30-foot spacing.

Because of the tree density, competition for light, water, and nutrients is great at Wayfarers, thus the trees are in a stressed condition. This makes the stands susceptible to dwarf mistletoe, root rot, and bark beetles. The goal of the project is to maintain the property over time for safe public use, with a forest cover that is healthy, and fire and wind resistant. Large mature trees are desired as the general forest cover over time. Tree crowns and root systems need adequate

site resources in order to resist insect and disease attack. Tree crowns that are not touching will have adequate site resources to grow and remain healthy as well as provide a crown-fire-resistant stand. There will be some diversity of tree sizes and ages on the site to provide replacement trees as some large trees die over time. A long-term goal is to restore the site to the historic stand structure of large, open, park-like stands dominated by ponderosa pine, with some Douglas fir.

The preferred climax species for this site, given topography, elevation, soil type, and moisture requirements, would be ponderosa pine. Douglas fir are not the desired climax tree in a heavily used public recreational area, as they are susceptible to wind load due to their shallow root system and are not fire or disease resistant. Therefore this project has been designed to remove Douglas fir to allow existing ponderosa pine to grow and remain healthy.

The specific objectives of this project will be:

1. To remove hazardous, diseased, and dead or dying trees.
2. To open the understory to promote the health of ponderosa pine.
3. Reduce stress on trees due to competition for light, water, and nutrients. That stress is resulting in increasing mortality due to the combined effects of dwarf mistletoe, root rot, and bark beetles.
4. To reduce fuel loads, ladder fuels, and the possibility of crown fires in order to protect the park and adjacent private lands.

Please see Appendix B for the completed prescription for Wayfarers.

10. Listing of Any Other Local, State, or Federal Agency That Has Overlapping or Additional Jurisdiction:

(a) Permits:

Agency Name	Permit	Date Filed/#

(b) Funding:

Agency Name	Funding Amount

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility

11. List of Agencies Consulted During Preparation of the EA:

Department of State Lands

PART II. ENVIRONMENTAL REVIEW

1. Evaluation of the impacts of the proposed action, including secondary and cumulative impacts on the physical and human environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
➢a. Soil instability or changes in geologic substructure?			x		y	1a
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			x		Y	1b
➢c. Destruction, covering, or modification of any unique geologic or physical features?		x				
d. Changes in siltation, deposition, or erosion patterns that may modify the channel of a river or stream, or the bed or shore of a lake?			x		Y	1c
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		x				
f. Other (list)						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

1a, b, and c: Timber removal will be done during the winter to minimize ground disturbance, compaction, erosion, and siltation. Any slash burning will be done using a burning boat to reduce impacts on vegetation and soils. Any disturbed areas will be reseeded with native grasses to reduce erosion and compaction. Any invading noxious weeds will be managed through the Regional Noxious Weed Program.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

2. AIR Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
➢a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13c.)			x		N	2a
b. Creation of objectionable odors?			x		N	2b
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		x				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		x				
♦e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		x				
f. Other						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

2a and b: Machinery used during the timber removal project will create noise and emissions. This project will be done in the winter to lessen disturbance. In addition, care will be taken to limit working hours to minimize disturbance to adjacent neighbors.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

3. WATER Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
➢a. Discharge into surface water or any alteration of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity?			x		Y	3a
b. Changes in drainage patterns or the rate and amount of surface runoff?		x				
c. Alteration of the course or magnitude of floodwater or other flows?		x				3c
d. Changes in the amount of surface water in any water body or creation of a new water body?		x				
e. Exposure of people or property to water-related hazards such as flooding?		x				
f. Changes in the quality of groundwater?		x				
g. Changes in the quantity of groundwater?		x				
h. Increase in risk of contamination of surface or groundwater?		x				
i. Effects on any existing water right or reservation?		x				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		x				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		x				
♦♦l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		x				
♦m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		x				
n. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

3a: The majority of this project will take place away from Flathead Lake. In any area treated near the lake, Best Management Practices will be followed. Reseeding of disturbed areas will occur to reduce chances for erosion.

3c: Due to ground disturbance there is a possibility of soil erosion in disturbed areas. Disturbed areas will be reseeded with native vegetation to ensure erosion does not occur. If erosion does occur due to heavy spring rains, steps will be taken to reduce or eliminate that erosion through the use of straw bails, netting, or other erosion barriers to limit runoff.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

4. VEGETATION Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Changes in the diversity, productivity, or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			x		N	4a
b. Alteration of a plant community?			x		N	4b
c. Adverse effects on any unique, rare, threatened, or endangered species?		x				
d. Reduction in acreage or productivity of any agricultural land?		x				
e. Establishment or spread of noxious weeds?			x		Y	4e
♦♦f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		x				
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

4a and b: One of the goals of this project is to change the tree habitat types to include more ponderosa pine and less Douglas fir. This will more closely match the historical species type on this terrain, will be closer to the optimum forest type for this elevation, slope, aspect, soil, and moisture area, and will reduce fuel loads and the opportunity for crown fires.

4e: There is a possibility for the spread of noxious weeds in disturbed soils. Disturbed soils will be reseeded with native vegetation. The area is managed under Region One's noxious weed management program, and any occurrence of noxious weeds will be treated chemically, biologically or mechanically under that program.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

5. FISH/WILDLIFE Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		x				
b. Changes in the diversity or abundance of game animals or bird species?			x		N	5b
c. Changes in the diversity or abundance of nongame species?			x		N	5c
d. Introduction of new species into an area?		x				
e. Creation of a barrier to the migration or movement of animals?		x				
f. Adverse effects on any unique, rare, threatened, or endangered species?		x				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest, or other human activity)?		x				
♦♦h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		x				
♦i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		x				
j. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

5b and c: With the change in tree density, there may be some minor impacts to the types or diversity of bird species in this particular park. Effect on the overall bird types or densities in the Bigfork area will be insignificant. Alan Wood, an FWP Biologist was consulted during the writing of the prescription for this property in order to minimize impacts to wildlife species. Biologists will also be involved in reviewing the prescription as laid out on the ground.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Increases in existing noise levels?			x		Y	6a
b. Exposure of people to severe or nuisance noise levels?			x		Y	6b
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		x				
d. Interference with radio or television reception and operation?		x				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

6a and b: Machinery used during the timber removal project will create noise and emissions. This project will be done in the winter to lessen disturbance. In addition, care will be taken to limit working hours to minimize disturbance to adjacent neighbors.

7. LAND USE Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		x				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		x				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		x				
d. Adverse effects on or relocation of residences?		x				
e. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			x		Y	8a
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		x				
c. Creation of any human health hazard or potential hazard?			x		Y	8c
♦d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a.)		x				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8a: The vehicles doing the timber removal will use oil and gas. Care will be taken to prevent spills.

8c: The removal of timber can be hazardous, with falling trees and heavy equipment. The site will be closed to the public while the work is being done. Professional personnel will be used, knowledgeable in safety practices and procedures to protect themselves while completing this work.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		x				
b. Alteration of the social structure of a community?		x				
c. Alteration of the level or distribution of employment or community or personal income?		x				
d. Changes in industrial or commercial activity?		x				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		x				
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		x				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		x				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electrical power, natural gas, other fuel supply or distribution systems, or communications?		x				
d. Will the proposed action result in increased use of any energy source?		x				
➢e. Define projected revenue sources.						
➢f. Define projected maintenance costs.						
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Alteration of any scenic vista, or creation of an aesthetically offensive site or effect that is open to public view?			x		N	11a
b. Alteration of the aesthetic character of a community or neighborhood?			x		N	11b
➢c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach tourism report.)			x		N	11c
♦d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails, or wilderness areas be impacted? (Also see 11a, 11c.)		x				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11a, b, and c: The timber removal at this site will alter the current look of the area, replacing a closed, forested environment with a more open environment. Disturbance from a logging operation will take one-to-two years to heal. In disturbed areas, seeding will occur with native grasses to lessen these impacts. Stumps will be cut to ground level when feasible to lessen visual impacts, and burning boats will be used to eliminate burn piles and large bare areas due to slash burning.

While efforts will be taken to keep visual impacts to a minimum, impacts will nevertheless occur. The less-dense forest will be a visual alteration, and whether that is a positive or negative will depend on who is viewing the site. The change is not expected to be offensive, but different.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
➢a. Destruction or alteration of any site, structure, or object of prehistoric, historic, or paleontological importance?		x				
b. Physical change that would affect unique cultural values?		x				
c. Effects on existing religious or sacred uses of a site or area?		x				
♦♦d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12a.)		x				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

C. SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole,:	IMPACT☼				Can Impact Be Mitigated☼	Comment Index
	Unknown☼	None	Minor☼	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources, which create a significant effect when considered together or in total.)		x				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?			x		Y	13b
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard, or formal plan?		x				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		x				
♦f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		x				
♦♦g. For P-R/D-J, list any federal or state permits required.						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

13b: Timber removal is hazardous. If Best Management Practices were not followed, or an individual trespasses on the site without the knowledge of the contractor, a tree could be toppled and kill an individual. The site will be posted and gated to prevent trespass, and a professional in the logging business will be used to complete the timber removal.

☼ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can not be evaluated.

➢ Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

PART II. ENVIRONMENTAL REVIEW (CONTINUED)

1. Description and analysis of reasonable alternatives (including the no-action alternative) to the proposed action, whenever alternatives are reasonably available and prudent to consider; and a discussion of how the alternatives would be implemented:

Alternative A: No action.

Action: FWP could not do forest management at Wayfarers and would let the natural progression take place.

Impacts: Fir beetle, dwarf mistletoe, and root rot would continue to impact the trees at Wayfarers, killing mainly fir trees. This would open the landscape up for the ponderosa pine, as would logging. Because the beetle-infested trees will not be removed, beetles will continue to disperse from currently impacted trees, causing more trees to die, including trees on adjacent private property. With removal of the beetle-killed trees, dispersal will continue, but at a reduced rate.

Dead and dying trees would add fuel loads in the park, increasing the likelihood of catastrophic fire. Ladder fuels increase the possibility of a crown fire, which would probably burn adjacent properties as well as Wayfarers. If a high wind occurred, falling trees and limbs would probably down powerlines to adjacent homeowners. This could cause sparks that could start a catastrophic fire. Due to fuel loads, the fire would, in all likelihood, burn so hotly that ponderosa pine would also burn. This would impact the long-term aesthetics at Wayfarers.

Dead and dying trees would become hazardous to recreational users due to falling branches (due to dwarf mistletoe) or falling trees (due to root rot).

The long-term aesthetics of the park will be impacted. As ponderosa pine are smothered due to lack of light, they will die, leaving Douglas fir the predominant species. The forest cover will not be wind resistant, and since the forest cover will remain dense, no new tree growth will be generated. This will lead to a forest of one age class. When that age class dies there may not be sufficient regeneration to sustain a forested environment.

Finally, there may be substantial liability for the state if hazardous conditions are knowingly allowed to continue. Those hazardous conditions include branches or trees injuring or killing recreational users, and hazards to adjacent landowners due to fire. In addition, as the beetles continue to increase in numbers, trees that are currently healthy will be impacted, including those on adjacent private property.

Alternative B: Remove hazardous and diseased trees only.

Action: FWP could remove hazardous and diseased trees only. FWP would not thin the existing trees or harvest all competing Douglas fir for a radius of 50-75 feet around selected maternal ponderosa pine.

Impacts: This alternative would remove dead and dying fir from the park, slowing the dispersal of beetles to adjacent trees. The dwarf mistletoe trees would be removed to slow the spread of that parasite.

Because of the removal of dead and dying trees, fire danger would be reduced; however, ladder fuels would not be removed, and tree crowns would continue to be close enough in most areas to make a crown fire a possibility.

Hazards from falling limbs and dead trees would be reduced, but this alternative does not address root rot; hence wind load would continue to be a factor in the area, increasing the hazard of a tree falling on a recreational user.

Because space would not be opened up around maternal ponderosa pine, regeneration of ponderosa pine would not be achieved. A continuation of the single age-class monoculture of fir would continue.

Alternative C: Preferred Alternative: Complete the prescription as recommended.

Action: Follow the attached prescription.

Impacts: Fir beetle, dwarf mistletoe, and root rot will be reduced, and the remaining trees will be more resistant to them. With removal of the beetle-killed trees, beetle dispersal will continue, but at a greatly reduced rate. Over time the forest cover will become healthy, and fire and wind resistant. A mixture of tree species, sizes, and ages will be achieved. Over an extended period of time the site will be restored to a large, open, park-like stand dominated by ponderosa pine, with some Douglas fir.

Because crown density will be reduced, dead and dying trees removed, and ladder fuels removed, the chance of catastrophic fire will be reduced. If a limb or tree were to break the powerline to adjacent neighbors, the possibility of catastrophic fire will be reduced, with a ground fire becoming the more likely outcome. Hence ponderosa pine, which is resistant to ground fires, will not be destroyed, and adjacent private residences would have their safety enhanced.

With the removal of dead and dying trees, hazards would be reduced for recreational users from limbs falling or from trees blowing over due to wind load.

Because space will be opened up around selected material (ponderosa pine), these trees will resist disease and insects better and will propagate more ponderosa pine in this site. Ponderosa pine is a more suitable tree for recreational sites due to deep rooting systems, and fire and disease resistance. In addition, the diversity and age class structure will be enhanced, with a mixture of tree species, sizes, and ages to provide replacement trees as some large trees die over time.

Finally, liability for the state will be reduced since hazardous conditions will be addressed.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

Work will be completed during the winter to lessen ground disturbance.

To lessen aesthetic impacts, stumps will be cut to ground level in all areas with heavy recreational traffic. Stumps in undisturbed areas of the park may be left.

Thinning and slash disposal operation will be conducted in one of the following manners, in order of desirability, with the final decision based on financial feasibility, and environmental and recreational impacts:

1. Thin, chip, and haul all slash from the site in the winter when snow and frozen ground are present.
2. Thin and progressively burn slash during open burning season using a burning boat.
3. Thin and progressively burn the slash during the open burning season using 2-4 designated burning spots.
4. Thin and pile the slash in 2-4 designated burning spots in winter to be burned during spring open-burning period.

Best Management Practices will be followed. Accredited loggers will be solicited for bids. The bidder will submit an operation plan specifying proposed slash disposal methods and equipment to be used. The successful bidder will be awarded the contract based on an evaluation of his operating plan as well as a stumpage price, if any.

Equipment use will be no larger than necessary to complete the project in a timely manner.

Any soil that is disturbed will be reseeded with a native grass mix.

The area will be incorporated into the Region's noxious weed management program, with close attention to the invasion of noxious weeds in disturbed areas.

Fish, Wildlife and Parks biologists have been involved in writing the prescription, and will be involved during the marking and logging processes.

PART III. NARRATIVE EVALUATION AND COMMENT

1a, b, and c: Timber removal will be done during the winter to minimize ground disturbance, compaction, erosion, and siltation. Any slash burning will be done using a burning boat to reduce impacts on vegetation and soils. Any disturbed areas will be reseeded with native grasses to reduce erosion and compaction. Any invading noxious weeds will be managed through the Regional Noxious Weed Program.

2a and b: Machinery used during the timber removal project will create noise and emissions. This project will be done in the winter to lessen disturbance. In addition, care will be taken to limit working hours to minimize disturbance to adjacent neighbors.

3a: The majority of this project will take place away from Flathead Lake. In any area treated near the lake, Best Management Practices will be followed. Reseeding of disturbed areas will occur to reduce chances for erosion.

3c: Due to ground disturbance there is a possibility of soil erosion in disturbed areas. Disturbed areas will be reseeded with native vegetation to ensure erosion does not occur. If erosion does occur due to heavy spring rains, steps will be taken to reduce or eliminate that erosion through the use of straw bails, netting, or other erosion barriers to limit runoff.

4a and b: One of the goals of this project is to change the tree habitat types to include more ponderosa pine and less Douglas fir. This will more closely match the historical species type on this terrain, will be closer to the optimum forest type for this elevation, slope, aspect, soil, and moisture area, and will reduce fuel loads and the opportunity for crown fires.

4e: There is a possibility for the spread of noxious weeds in disturbed soils. Disturbed soils will be reseeded with native vegetation. The area is managed under Region One's noxious weed management program, and any occurrence of noxious weeds will be treated chemically, biologically or mechanically under that program.

5b and c: With the change in tree density, there may be some minor impacts to the types or diversity of bird species in this particular park. Effect on the overall bird types or densities in the Bigfork area will be insignificant. Alan Wood, an FWP Biologist was consulted during the writing of the prescription for this property in order to minimize impacts to wildlife species. Biologists will also be involved in reviewing the prescription as laid out on the ground.

6a and b: Machinery used during the timber removal project will create noise and emissions. This project will be done in the winter to lessen disturbance. In addition, care will be taken to limit working hours to minimize disturbance to adjacent neighbors.

8a: The vehicles doing the timber removal will use oil and gas. Care will be taken to prevent spills.

8c: The removal of timber can be hazardous, with falling trees and heavy equipment. The site will be closed to the public while the work is being done. Professional personnel will be used, knowledgeable in safety practices and procedures to protect themselves while completing this work.

11a, b, and c: The timber removal at this site will alter the current look of the area, replacing a closed, forested environment with a more open environment. Disturbance from a logging operation will take one-to-two years to heal. In disturbed areas, seeding will occur with native grasses to lessen these impacts. Stumps will be cut to ground level when feasible to lessen visual impacts, and burning boats will be used to eliminate burn piles and large bare areas due to slash burning.

While efforts will be taken to keep visual impacts to a minimum, impacts will nevertheless occur. The less-dense forest will be a visual alteration, and whether that is a positive or negative will depend on who is viewing the site. The change is not expected to be offensive, but different.

13b: Timber removal is hazardous. If Best Management Practices were not followed, or an individual trespasses on the site without the knowledge of the contractor, a tree could be toppled and kill an individual. The site will be posted and gated to prevent trespass, and a professional in the logging business will be used to complete the timber removal.

PART IV. EA CONCLUSION SECTION

1. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

Based on the level of impacts and anticipated public comment, an Environmental Assessment is the proper level of analysis on this project.

2. Describe the level of public involvement for this project, if any; and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances:

The environmental assessment will be posted on the FWP Web site. News releases will be sent out on a statewide basis, and adjacent neighbors will be notified in writing. Fred Hodgeboom, the forester hired by FWP, will meet with interested parties at the Harry Horn picnic shelter to conduct a tour of the proposed project on Thursday, August 5, at 6:00 p.m. One portion of the project will be marked so people can get a good assessment of the proposed project. A questionnaire will be available for comments on the project.

During the internal review period, the environmental assessment and prescription was sent to the Department of State Lands for comment and recommendations.

3. Duration of comment period, if any: Thirty days, from July 19 through August 17, 2004.

4. Name, title, address, and phone number of the person(s) responsible for preparing the EA:

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APPENDIX B

WAYFARERS STATE PARK
FOREST HEALTH AND FIRE HAZARD REDUCTION PRESCRIPTION

LOCATION: Wayfarers State Park, approximately 60 acres, is located about one mile south of Bigfork, Montana, located between Montana Hwy 35 and Flathead Lake, S1/2, SE1/4 Sec. 36, T27N, R20W, Flathead County, Montana.

DESIRED FUTURE CONDITION (GOAL): The MT Department of Fish, Wildlife & Parks (DFWP) desires to maintain the property over time for safe public use, with a forest cover that is healthy, and fire and wind resistant. Large, mature trees are desired as the general forest cover over time. Tree crowns and root systems need adequate site resources (sun, water, soil nutrients) in order to resist insect and disease attack. Tree crowns that are not touching will have adequate site resources to grow and remain healthy as well as providing a crown-fire-resistant stand or community of trees. A healthy stand will have a mixture of tree species native to the site. There will be some diversity of tree sizes and ages on the site to provide replacements as some large trees die over time. A long-term goal is to restore the site to the historic stand structure of large, open, park-like stands dominated by ponderosa pine, with some Douglas fir.

EXISTING CONDITION: Existing stands are characterized by lack of disturbance for several decades resulting in dense, overcrowded stands dominated by Douglas fir with lots of dwarf mistletoe infection. Competition for light, water, and nutrients is at a maximum in these stands. Result is stress and increasing mortality due to the combined effects of dwarf mistletoe, root rot, and bark beetles. Douglas fir bark beetles are rapidly increasing and may continue due to big broods hatching out of the recent large fires and continuing drought.

Dwarf mistletoe is a parasitic plant that takes root and feeds off the host tree. Each dwarf mistletoe species is adapted to infect only a single species of tree. The presence of the parasite causes abnormal growth of clusters of small branches (often called witches brooms) and swollen knots and burls on the trunk and branches of infected trees. The parasite is spread by a sticky seed that ejects only a few feet from the mature pod. Therefore, it spreads very slowly. Birds may also spread the seed. The mistletoe does not kill the host tree, but it saps some of the nutrients and water from the host, and if the infection is heavy, may weaken the tree and predispose the tree to other insect and disease infections. The witches' brooms collect more wind, snow, and ice loads in the winter, and the abnormal grain or burl at the base of the infection weakens the strength of the wood, resulting in the brooms being broken off or tops broken out of trees. The Douglas fir witches' brooms, whether in the tree or on the ground, contribute flash fuels and increase fire hazard in heavily infected stands.

Root rot is caused by a fungus that kills the roots of a tree, often killing the tree by weakening it so that it is vulnerable to bark beetle attack and windthrow. Douglas fir is

especially prone to several species of root rot. Root rot also makes the tree less resistant to wind load, and thus hazardous for users in recreational areas.

Douglas fir bark beetle is a beetle adapted to specifically attack Douglas fir. The bark beetle can detect which Douglas fir trees are under stress by the organic compounds evaporating from the tree. Zeroing in on stressed trees (deprived of water by the effects of dwarf mistletoe, root rot, and drought), hundreds of adult beetles bore into the tree and tunnel between the bark and wood while laying eggs. The eggs hatch and thousands of grub worms begin to feed on the cambium of the tree. The adult beetles and larval galleries girdle the tree and deprive the crown of food and water, thus killing the tree.

Douglas fir are exceptionally vulnerable to the combined effects of dwarf mistletoe, root rot, bark beetles, and drought. It is usually difficult to attribute the cause of death to a single pathogen or cause. Multiple agents of change are almost always present. Competition for site resources from excess Douglas fir is stressing the surviving ponderosa pine causing them to be more vulnerable to bark beetle attack. In addition to the wide array of pests affecting Douglas fir, lower limbs persist long after they die from lack of sun, providing a ladder of dead limbs that allows a fire to easily spread into the thick upper crowns. Stands with heavy composition of Douglas fir are more prone to severe crown fires than stands of ponderosa pine and larch. When Native American and natural fires burned valley sites like Wayfarers regularly, these same traits caused the fires to kill the young Douglas fir and favored the survival of ponderosa pine and larch. Ponderosa pine and larch are more resistant to all of the agents of change than Douglas fir, so they are better choices for recreation-site tree cover.

The biological factors described above are resulting in accumulating ground fuels at Wayfarers due to weather breakage; mistletoe weakened, abnormally branched trees; and dense tree crowns capable of carrying catastrophic crown fires. These stand conditions, and the density of Douglas fir under and around surviving ponderosa pine, are prevalent between the improvements at the lakeshore and the Harry Horn picnic area improvements on the east end of the park. In severe burning conditions, a fire start near the lakeshore south of the park or within the park could rapidly develop into a crown fire threatening the Harry Horn developed site and adjacent private property, as well as killing all remaining ponderosa pine, which are normally fire resistant.

SITE SPECIFIC PRESCRIPTION: The existing tree crowns must be thinned out to reduce the possibility of fire racing from crown to crown, and ground fuels must be reduced. This can be accomplished by thinning the stand between the boat launch parking lot and the access road above the Harry Horn parking lot to a tree spacing of 20-30 feet between these mature trees (see attached map).

First priority will be to leave existing ponderosa pine and concentrate on removing as much mistletoe-infected Douglas fir as possible. This will give the best trees increased light, water, and nutrients they need to resist insect and disease attack and become more resistant to wind.

Thinning to release healthy ponderosa pine will be the secondary objective. To increase diversity, at least one or two surviving veteran, old-growth ponderosa pine or just a good mature tree will be selected, and harvest of all the competing Douglas fir for a radius of 50-75 feet around the maternal pine will be done. This will open spaces for new ponderosa pine to germinate and/or to be planted in order to maintain a mixed-age class into the future. Ponderosa must have nearly full sunlight to germinate and grow. Sound snags that are not a safety hazard will be left standing for bird habitat.

The ponderosa pines around the lakeshore facilities are currently in good condition.

IMPLEMENTATION: The treatment will be implemented through a commercial thinning timber sale, specifying mechanical harvesters and transport of logs and slash to designated loading or disposal areas. The commercial thinning will take place in the winter when the ground is frozen to minimize ground and vegetative disturbance. Native grass seeds will be sewn in all areas of ground disturbance. Stumps will be cut to ground level in all areas with heavy recreational traffic. Stumps in undisturbed areas of the park may be left. The commercial value of the excess trees on the site should cover the cost of completely disposing of the slash resulting from the harvested trees as well as the natural accumulation of excess ground fuels. The leave trees will be marked in late September or early October with orange ribbons by a professional forester. The stand marked for thinning will be available for public review prior to seeking bids.

The thinning and slash disposal operation will be conducted in one of the following alternatives in order of desirability, with the final decision based on financial feasibility, and environmental and recreational impacts:

A. Thin, chip, and haul all slash from site in winter (January/February 2005) with snow and frozen ground (Stone Container has such equipment).
B. Thin and progressively burn the slash during the open burning season in October 2004 or March 2005 using a burning boat.
C. Thin and progressively burn the slash during the open burning season in October 2004 or March 2005 using 2-4 designated burning spots.
D. Thin and pile the slash in 2-4 designated burning spots in winter to be burned during the March 2005 open burning period.

The above specifications will be sent to several Montana Logging Association-accredited loggers soliciting bids on the thinning job. Bidder will submit an Operation Plan specifying proposed slash disposal methods and equipment to be used. The successful bidder will be awarded based on evaluation of his operating plan as well as a stumpage price, if any. Any excess value of the trees removed over costs will go to the Real Property Trust. The interest from the Real Property Trust is used for Fish, Wildlife & Parks Operations and Maintenance.

Submitted by: Fred D. Hodgeboom, Forester